AMENDMENTS

Amendments to the Claims:

Please replace all prior versions and listings of claims with the following Listing of Claims:

1. (Previously Amended) An isolated nucleic acid comprising a nucleotide sequence selected from the group consisting of:

a) the *dbv* gene cluster encoding the polypeptides required for the synthesis of A40926 (SEQ ID NO: 1);

b) a nucleotide sequence encoding the same polypeptides encoded by the *dbv* gene cluster (SEQ ID NO: 1), other than the nucleotide sequence of the *dbv* gene cluster;

c) any nucleotide sequence of *dbv* ORFs 1 to 37, encoding the polypeptides of SEQ ID NOS: 2 to 38; and

d) a nucleotide sequence encoding the same polypeptides encoded by any of *dbv* ORFs 1 to 37 (SEQ ID NOS: 2 to 38), other than the nucleotide sequence of said ORF.

2. (Previously Amended) The isolated nucleic acid of claim 1, wherein the nucleotide sequence is selected from the group consisting of:

e) a nucleotide sequence of any of *dbv* ORFs 3 to 4, 6 to 10, 18 to 20, 22 to 23, 29 to 30, and 36 (SEQ ID NOS: 4 to 5, 7 to 11, 19 to 21, 23 to 24, 30 to 31, and 37);

f) a nucleotide sequence encoding the same polypeptide encoded by any of *dbv* ORFs 3 to 4, 6 to 10, 18 to 20, 22 to 23, 29 to 30, and 36 (SEQ ID NOS: 4 to 5, 7 to 11, 19 to 21, 23 to 24, 30 to 31, and 37), other than the nucleotide sequence of said ORF;

g) a nucleotide sequence encoding a polypeptide that is at least 80% identical in amino acid sequence to a polypeptide encoded by any of *dbv* ORFs 3, 6 to 9, 18 to 20, 22 to 23, 29 to 30, and 36 (SEQ ID NOS: 4, 7 to 10, 19 to 21, 23 to 24, 30 to 31, and 37); and

h) a nucleotide sequence encoding a polypeptide that is at least 87% identical in amino acid sequence to a polypeptide encoded by any of *dbv* ORFs 4 and 10 (SEQ ID

NOS: 5 and 11).

3. (Previously Amended) The isolated nucleic acid according to claim 2, wherein the nucleic acid sequence comprises a combination of nucleotide sequences that encode polypeptides required for the synthesis of the 4-hydroxy-phenylglycine residues of A40926 selected from the group consisting of *dbv* ORFs 1, 2, 5, 37 (SEQ ID NOS: 2, 3, 6 and 38), and other nucleotide sequences encoding the same polypeptides.

4. (Previously Amended) The isolated nucleic acid according to claim 2, wherein the nucleic acid sequence comprises a combination of nucleotide sequences that encode polypeptides required for the synthesis of the 3,5-dihydroxy-phenylglycine residues of A40926 selected from the group consisting of *dbv* ORFs 30 to 34, 37 (SEQ ID NOS: 31 to 35, and 38), and other nucleotide sequences encoding the same polypeptides.

5. (Previously Amended) The isolated nucleic acid according to claim 2, wherein the nucleic acid sequence comprises a combination of nucleotide sequences that encode polypeptides required for the synthesis of the heptapeptide skeleton of A40926 selected from the group consisting of *dbv* ORFs 16, 17, 25, 26, 36 (SEQ ID NOS: 17 to 18, 26 to 27, and 37), and other nucleotide sequences encoding the same polypeptides.

6. (Previously Amended) The isolated nucleic acid according to claim 2, wherein the nucleic acid sequence comprises a nucleotide sequence that encodes a polypeptide required for the chlorination of the aromatic residues of amino acids 3 and 6 of A40926 selected from the group consisting of *dbv* ORF 10 (SEQ ID NO: 11), and other nucleotide sequences encoding the same polypeptide.

7. (Previously Amended) The isolated nucleic acid according to claim 2, wherein the nucleic acid sequence comprises a nucleotide sequence that encodes a polypeptide required for the β-hydroxylation of the tyrosine residue of amino acid 6 of A40926 selected from the group consisting of *dbv* ORF 28 (SEQ ID NO: 29), and other nucleotide sequences encoding the same polypeptide.

8. (Previously Amended) The isolated nucleic acid according to claim 2, wherein the nucleic acid sequence comprises a combination of nucleotide sequences that encode polypeptides required for the cross-linking of the aromatic residues of amino acids at positions 2 and 4, 4 and 6, 1 and 3, and 5 and 7 of A40926 selected from the group consisting of *dbv* ORFs 11 to 14 (SEQ ID NOS: 12 to 15), and other nucleotide sequences encoding the same polypeptides.

9. (Previously Amended) The isolated nucleic acid according to claim 2, wherein the nucleic acid sequence comprises a combination of nucleotide sequences that encode polypeptides required for the addition and formation of the N-acyl glucuronamine residue of A40926 selected from the group consisting of ORFs 9, 23, 29 (SEQ ID NOS: 10, 24 and 30), and other nucleotide sequences encoding the same polypeptides.

10. (Previously Amended) The isolated nucleic acid according to claim 2, wherein the nucleic acid sequence comprises a nucleotide sequence that encodes a polypeptide required for the attachment of the mannosyl residue of A40926 selected from the group consisting of *dbv* ORF 20 (SEQ ID NO: 21), and other nucleotide sequences encoding the same polypeptide.

11. (Previously Amended) The isolated nucleic acid according to claim 1, wherein the nucleic acid sequence comprises a nucleotide sequence that encodes a polypeptide required for the N-methylation of A40926 selected from the group consisting of *dbv* ORF 27 (SEQ ID NO: 28), and other nucleotide sequences encoding the same polypeptide.

12. (Previously Amended) The isolated nucleic acid according to claim 2, wherein the nucleic acid sequence comprises a combination of nucleotide sequences that encode polypeptides required for export of A40926 or some of its precursors outside of the cytoplasm and for conferring resistance to A40926 to the producing strain selected from the group consisting of *dbv* ORFs 7, 18, 19, 24, 35 (SEQ ID NOS: 8, 19 to 20, 25 and 36), and other nucleotide sequences encoding the same polypeptides.

13. (Previously Amended) The isolated nucleic acid according to claim 2, wherein the nucleic acid sequence comprises a combination of nucleotide sequences that encode polypeptides required for regulating the expression of one or more genes of the *dbv* gene cluster selected from the group consisting of dbv ORFs 3, 4, 6, 22 (SEQ ID NOS: 4, 5, 7 and 23), and other nucleotide sequences encoding the same polypeptides.

14. (Currently Amended) The isolated nucleic acid according to claim 1, wherein the nucleic acid sequence comprises a nucleotide sequence ~~comprises~~ comprising the *dbv* gene cluster encoding the polypeptide required for the synthesis of a A40926, wherein an in frame deletion has been introduced in the nucleotide sequence encoding the polypeptides required for the attachment of the mannosyl residue.

15. (Previously Amended) The isolated nucleic acid according to claim 1 comprising a nucleotide sequence carrying at least one extra-copy of at least one of the *dbv* ORFs 1 to 37 (SEQ ID NOS: 2 to 38) or of a nucleotide sequence encoding the same polypeptides encoded by said *dbv* ORF, other than the nucleotide sequence of said *dbv* ORF.

16. (Canceled)

17. (Previously Amended) A recombinant DNA vector which comprises a DNA sequence as selected from the group consisting of claim 1.

18. (Previously Amended) The recombinant vector according to claim 17, wherein the recombinant vector is an ESAC vector.

19. (Canceled)

20. (Canceled)

21. (Previously Amended) A method for increasing production of A40926 by a

microorganism capable of producing A40926 or a precursor thereof by means of a biosynthetic pathway, said method comprising:

a) transforming with a recombinant DNA vector a microorganism that produces A40926 or a A40926 precursor by means of a biosynthetic pathway, wherein said DNA vector codes for the expression of an activity that is rate limiting in said pathway;

b) culturing said microorganism transformed with said vector under conditions suitable for cell growth, expression of said gene, and production of said antibiotic or antibiotic precursor.

22. (Canceled)

23. (Canceled)

24. (Cancelled)

25. (Cancelled)

26. (Canceled)

27. (Cancelled)

28. (Cancelled)

29. (Canceled).

30. (New) An isolated nucleic acid comprising the nucleotide sequence of SEQ ID NO:1.

31. (New) An isolated nucleic acid encoding the polypeptides of SEQ ID NOS: 2 to 38.

32. (New) A vector comprising the nucleic acid of claim 31.

33. (New) A host cell comprising the vector of claim 32.